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(54) Packaging for substantially rectangular blocks consisting of one or more articles.

(57) Packaging for substantially rectangular contents consisting of one or more articles, said packaging comprising:

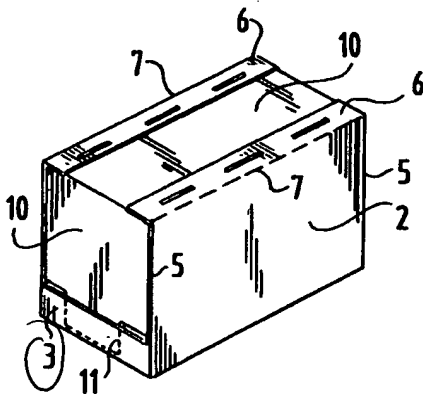
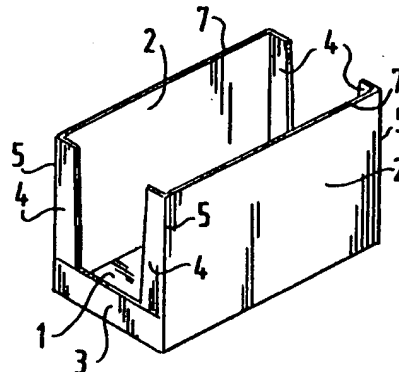
a substantially rectangular base flat (1);

upright wall flats (2) connected to the edges of said base flat (1); as well as

a lid flat connected to the top edges of said wall flats, for encasing the substantially rectangular contents, wherein said lid flat forms a blank (10) with at least one wall flat, said blank having wholly or partially detachable fastening means (6) for fixing said

blank to the other flats.

A packaging according to the invention is sufficiently sturdy to enable stacking, requires only a minimal amount of material and is very simple to take apart. Further a lighter material can be used for the closing blank, as there is no risk of damage by the bottom of a packaging placed on top, since this other packaging rests entirely on parts associated with the other flats manufactured of a stronger material.

**FIG. 1a****FIG. 1b****EP 0 647 565 A1**

The invention relates to a packaging for encasing substantially rectangular contents consisting of one or more articles, said packaging comprising: a substantially rectangular base flat; upright wall flats connected to the edges of said base flat; as well as a lid flat connected to the top edges of said wall flats.

It is known for transporting articles to make use of a packaging forming an integral unit, which packaging is opened at its destination and the content consisting of one or more articles is transferred to shelves. A drawback is that after unpacking the packaging is useless and is disposed of as waste. The transfer of the articles from the packaging to the shelves moreover costs a great deal of time, particularly when the sell-by date of the articles has to be taken into account, whereby newly arrived articles must be arranged behind articles already placed in the shelves.

It is known in the prior art to utilize as a visual display arrangement one unit of a packaging consisting of two separate units manufactured from the same material, whereby a distinction can be made between a display unit and a closing unit. Herein at least the display unit is provided with designations for recognition and presentation of the articles. The display unit is opened in a number of planes in order to provide quite easy access to the contents. The closing unit closing the display unit covers at least the opened planes of the display unit and is fixed to the display unit using fastening means such as an adhesive tape or a tape which is arranged under tension round the display unit and the closing unit and holds both units together during transport.

A drawback to the above described known art is that at the destination quite a lot of time and quite a few operations are still required to make the packaging suitable as a visual display arrangement. Furthermore, in the packaging consisting of a display unit and a closing unit considerably more material is required than in the case of a packaging consisting of one unit, since the closing unit must cover the opened planes of the display unit and must also clamp the sides connecting the opened planes to the adjoining wall flats since the adjoining wall flats will otherwise bend outward. Closing of this packaging, i.e. arranging the generally pre-manufactured closing unit over the generally pre-manufactured display unit, where the closing unit fits closely over the display unit, after the contents have been arranged in the display unit, costs considerably more time and effort than in the case of a packaging formed by an integral unit. Furthermore, the sturdiness of this packaging consisting of two separate units is markedly less than that of a packaging formed by an integral unit.

The invention has for its object to obviate the above stated drawbacks and provides to this end a packaging which is distinguished in that the lid flat forms a blank with at least one wall flat, said blank having wholly or partially detachable fastening means for fixing said blank to other flats.

The invention is further elucidated with reference to the figure description of a number of embodiments of the invention following hereinbelow. In the drawing:

- I fig. 1a and fig. 1b show a perspective view of a first embodiment of the packaging according to the invention, respectively in a closed state (fig. 1a), and in an opened state (fig. 1b);
- II fig. 2a and fig. 2b show a perspective view of a second embodiment of the packaging according to the invention, respectively in a closed state (fig. 2a), and in an opened state (fig. 2b);
- III fig. 3a and fig. 3b show a perspective view of a third embodiment of the packaging according to the invention, respectively in a closed state (fig. 3a), and in an opened state (fig. 3b);
- IV fig. 4a and fig. 4b show a perspective view of a fourth embodiment of the packaging according to the invention, respectively in a closed state (fig. 4a), and in an opened state (fig. 4b).

The same components are designated in the figures with the same reference numerals.

The packaging according to the invention shown in fig. 1a and 1b comprises: a base flat (1); side strips (3) connected to the base flat; two wall flats (2) also connected to the base flat (1); fastening strips (4) in two side planes connected to the wall flats (2) and fastening strips (6) also connected to these wall flats (2) in the top plane; and a blank (10) formed by a lid flat and two wall flats.

The blank (10) formed by a lid flat and two wall flats is placed against the fastening strips (4) arranged in the side planes and connected along sides (5) to the other wall flats (2). The blank (10) is fixed under the fastening strips (6) arranged in the top plane and connected along sides (7) to the other wall flats (2). In this embodiment fixing is achieved by hot-melt. The wall flats of blank (10) co-act with the fastening strips (4) and the side strips (3) connected to the base flat (1) to fully cover the relevant side planes. The wall flats of blank (10) are held in place by insert flaps (11) inserted behind the side strips (3). By tearing the tear lines coinciding in this embodiment with the sides (7) it is possible to remove the blank (10) in upward direction with the fastening strips (6) still attached thereto, whereby the packaging is made suitable for display.

In a packaging according to the invention a different material can be used for the blank (10) as that of the assembled or integrally formed other wall flats (2) and base flat (1). The blank (10) is

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manufactured for instance of corrugated cardboard or solid cardboard or kraft paper and the assembled or integrally formed other wall flats (2) and the base flat (1) are manufactured for example from corrugated cardboard.

In the embodiment of fig. 2 the wall flats of blank (10) and the side strips (3) do not entirely cover the opened side planes of the display unit and an opening (8) remains or this opening is covered by a separate board. One wall flat of blank (10) is attached to the relevant fastening strips (4) in a manner such that these fixings can easily be detached to make the packaging suitable for display, together with tearing the tear lines coinciding with the sides (7). To strengthen the packaging made suitable for display a tear line is arranged in blank (10), which tear line coincides in this embodiment with the side connecting a wall flat and the top flat of the blank (10). The wall flat (10') of the blank (10) left behind after tearing of the tear lines is firmly attached to the fastening strips (4) in the relevant side plane in order to obtain a greater sturdiness of the packaging now made suitable for display.

The embodiment of the invention shown in fig. 3 only differs from the embodiment shown in fig. 2 in that in the closed state of the packaging the wall flats of the blank (10) do co-act in this embodiment with the side wall strips (3) to fully cover all opened side planes.

Shown in fig. 4 is a further embodiment according to the invention, wherein after complete or partial removal of the blank (10) edge strips (16) remain behind in the top plane, where these edge strips (16) are foldable along the fold lines coinciding with the sides (7). For this purpose the tear lines are moved inward from the sides (7) in the top plane, whereby the edge strips (16) consist of at least portions of the fastening strips (6) and portions of the top flat of the blank (10). In another embodiment according to the invention of tear-off portions are used for this purpose instead of tear lines, which tear-off portions are also fastening means for fixing the fastening strips (6) to the top flat of the blank (10), whereby the edge strips (16) consist only of the fastening strips (6). In all embodiments packagings according to the invention are better stackable one on top of another as a result of a greater sturdiness in the closed situation. The blank is attached in the top plane to the undersides of the fastening strips, so that a lighter material can be used for the blanks, as fastening strips protect the blank from damage by the bottom of another packaging placed on top.

In the above described embodiments of the invention the packaging is block-shaped, although it is equally possible for the packaging to have another shape, for instance the form of a hexagonal

cylinder. It is likewise possible that the base flat of the packaging is fixed to reinforcements, such as a pallet.

5 Claims

1. Packaging for substantially rectangular contents consisting of one or more articles, said packaging comprising:

a substantially rectangular base flat;
upright wall flats connected to the edges of said base flat; as well as

a lid flat connected to the top edges of said wall flats, for encasing the substantially rectangular contents, **characterized in that** said lid flat forms a blank with at least one wall flat, said blank having wholly or partially detachable fastening means for fixing said blank to other flats.

2. Packaging as claimed in claim 1, **characterized in that** fastening strips connected to other wall flats are arranged in the top plane over said lid flat of said unit.

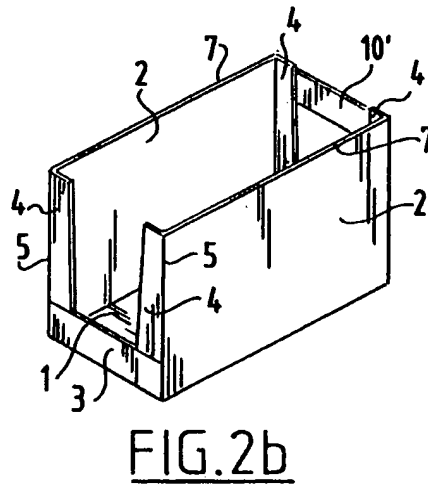
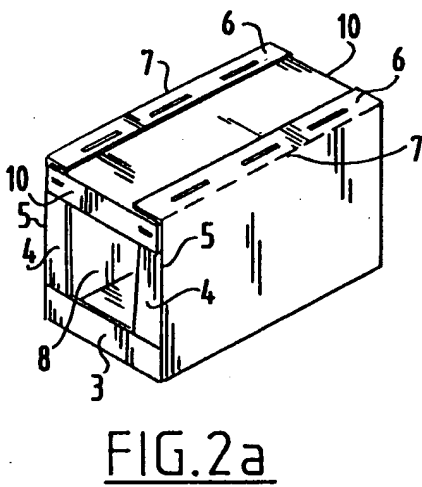
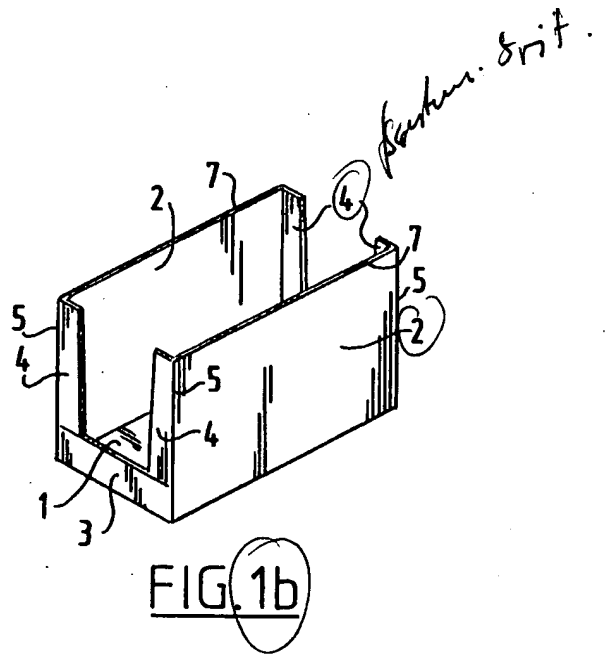
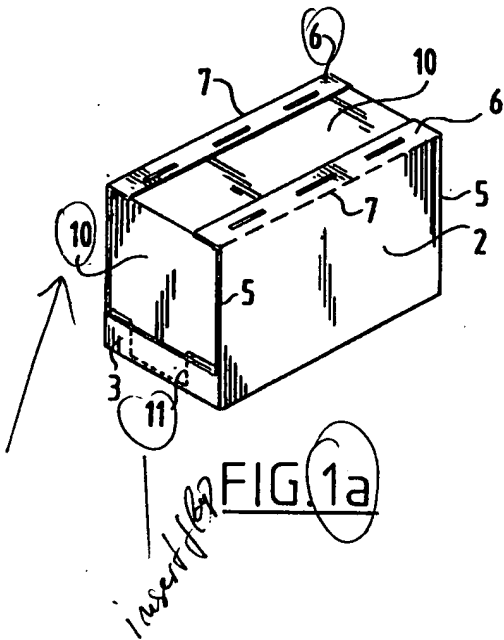
3. Packaging as claimed in claim 1, **characterized in that** the fastening means are formed by tear lines, where tear lines are arranged along the top edge of one or each side plane with a wall flat forming a blank with the top flat.

4. Packaging as claimed in claim 1, **characterized in that** an or each tear line along the upper edge of an or each other wall flat is moved inward in the top plane.

5. Packaging as claimed in claim 1 or 4, **characterized in that** one or each remaining edge strip in the top plane is foldable along a fold line.

6. Packaging as claimed in claim 1, **characterized in that** the other parts of the packaging are manufactured from corrugated cardboard.

7. Packaging as claimed in claim 1, **characterized in that** said blank formed by said top flat and said wall flats is manufactured from corrugated cardboard or solid cardboard or kraft paper.



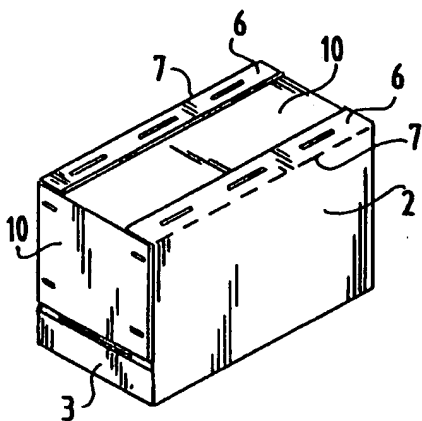


FIG. 3a

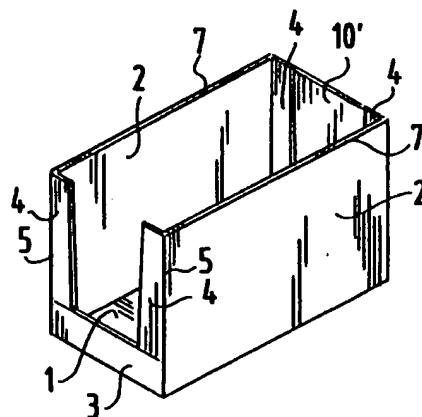


FIG. 3b

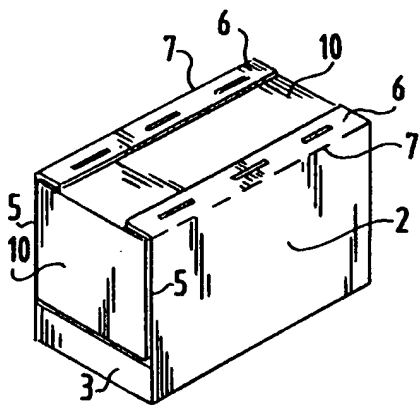


FIG. 4a

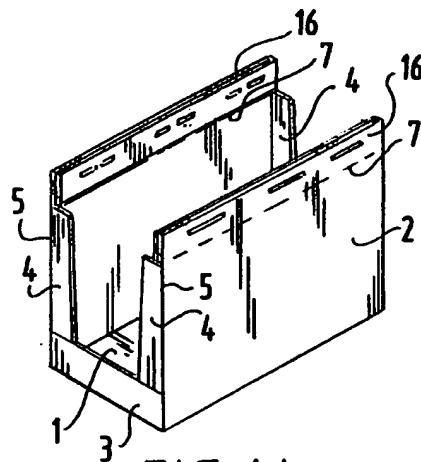


FIG. 4b



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EUROPEAN SEARCH REPORT

Application Number
EP 94 20 2819

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	EP-A-0 266 321 (DANTI)	1,2,4,6,7	B65D5/32 B65D5/54
A	* column 3, line 15 - column 4, line 31; figures 1-4 *	3,5	
X	EP-A-0 235 852 (LEEBEEK)	1,2,6,7	
A	* column 4, line 7 - column 5, line 4; figures 1-5 *	3-5	
X	FR-A-2 498 561 (FERRARI)	1,3,6,7	
	* page 5, line 15 - page 6, line 36; figures 1-6 *		
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B65D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 26 January 1995	Examiner Vantomme, M
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application I : document cited for other reasons A : member of the same patent family, corresponding document			